



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,065	10/04/2000	Peter Coad	30013630-0003	8737
23485	7590 06/03/2004	EXAMINER		VER .
JINAN GLASGOW			CHUONG, TRUCT	
P O BOX 285	39			
RALEIGH, NC 276118539			ART UNIT ' `	PAPER NUMBER
			2174	18
			DATE MAILED: 06/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

•		
	Application No.	Applicant(s)
_	09/680,065	COAD ET AL.
Office Action Summary	Examiner	Art Unit
	Truc T Chuong	2174
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ti y within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS fron t, cause the application to become ABANDONE	mely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on 19 M 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under E	s action is non-final. nce except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) 1-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-40 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent (s) (PTO-1449 or PTO/SB/08)	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F	
Paper No(s)/Mail Date	6) Other:	atom Apphobilon (1 10-102)

Art Unit: 2174

DETAILED ACTION

- 1. This communication is responsive to Amendment C, filed 3/19/04.
- 2. Claims 1-40 are pending in this application. Claim 1, 6, 13, 17, 22, 29, 33, and 40 are independent claims. In Amendment C, claims 1, 2, 6, 11, 14, 15, 17, 27, 29, 30, 31, and 38 are amended. This action is made non-final.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Per Cederqvist et al. (Version Management with CVS for CVS 1.11.3, 1992,1993).

As to claim 1, Per Cederqvist teaches a method in a data processing system for displaying versions of source code, each version reflecting an instance in an edit history (1.1 What is CVS, page 3), the method comprising the steps of.

determining a language of the source code (1.3.1 Getting the source, page 6, .c files (backend.c, driver.c, ...) indicate that these source codes were written in C program);

storing indications of the edits to the source code (1.3.2 Committing your changes, page 6, and 1.3.4 Viewing differences, page 7);

Art Unit: 2174

converting the source code with the indications of the edits from the language into a language-neutral representation (10.3 Conflicts example, page 62-64, shows differences between old and modified versions of the program file, and 5.3 Accessing branches show different version numbers, pages 42-44);

using the language-neutral representation to display the converted the source code (a user can use an Emacs package called emerge to help the user resolves conflicts, page 64; therefore, to be able to solve the conflicts of the codes or versions, CVS must be somehow view the source code with warning comments or debugging messages to help the user solving the conflicts of the codes) with the indications of the edits (>>>> and <<<<, pages 62-63, indicate modified part of the code, and 5.3 Accessing branches show different version numbers, pages 42-44); and using the language-neutral representation to display a corresponding graphical representation of the source code (Per Cederqvist teaches a graphical user interface for operations because CVS can be run on different platforms including Windows NT/95, 2.2.3 File Permission issues specific to Windows, page 12, and Per Cederqvist clearly shows editing environments are VARY with user operating systems such as: vi editor for UNIX or Notepad editor for Windows NT/95, 1.3.2 Committing your changes, page 6. Notepad and other editors of Windows NT/95 are clearly graphical representations because they are used to view and edit source code with multiple control icons for users to select from.) with the indications of the edits (>>>> and <><<, pages 62-63, indicate modified part of the code, and 5.3 Accessing branches show different version numbers, pages 42-44) wherein the graphical representation of the converted source code is not merely a text representation on a user interface (Notepad and other graphical

Art Unit: 2174

representations are not only displayed the source code in text, but also provide multiple control icons for users to select from; >>>> and <<<< are not either an alphanumeric or text display).

As to claim 11, it is individually similar in scope to claim 1 above; therefore, rejected under similar rationale.

As to claim 2, Per Cederqvist teaches the method of claim 1, wherein the source code and the corresponding graphical representation of the <u>converted</u> source code (see the rejection of converted source code of claim 1 above) are displayed sequentially (\$CVSROOT, page 11).

As to claims 3 and 8, Per Cederqvist inherently teaches the method of claim 1 wherein a rate at which the source code with the indications of the edits is displayed is adjustable because any editing screens of Microsoft Windows can be resized (adjustable) minimized, or maximized.

As to claims 4 and 9, Per Cederqvist teaches the method of claim 1, wherein the source code with the indications of the edits is displayed in reverse order (10.2 Bringing a file up to date, page 61, in first paragraph shows the newest revision of the file is extracted from the repository and put in working directory).

As to claims 5 and 12, Per Cederqvist teaches the method of claim 1, wherein the graphical representation is one of the group consisting of a user case diagram, a sequence diagram (history files for each version control, page 11), a collaboration diagram, a state transition diagram, an activity diagram, a package diagram, a component diagram and a deployment diagram.

As to claim 6, Per Cederqvist teaches a method in a data processing system for displaying versions of source code, each version reflecting an instance in an edit history, the method comprising the steps of:

Art Unit: 2174

storing indications of the edits to the source code (page 63); and

displaying the versions of the source code with the indications of the edits (history files, page 11) wherein the source code is represented graphically on a user interface in a language-neutral representation (5.3 Accessing branches show different version numbers, pages 42-44) for showing differences in the source code over time using graphical presentation that are not merely alphanumeric or text-based display (Notepad and other graphical representations are not only displayed the source code in text, but also provide multiple control icons for users to select from; >>>> and <<<< are not either an alphanumeric or text display).

As to claim 7, Per Cederqvist teaches the method of claim 6, wherein the versions of the source code are displayed sequentially (pages 45-46).

As to claims 10, 13-15, they are similar in scope to claim 1 above; therefore, rejected under similar rationale.

As to claim 16, Per Cederqvist teaches the method of claim 13, wherein the source code is displayed after the <u>converted</u> source code (see claim 1 for converted source code) with the edit is displayed (10.3 Conflicts example, page 62-64, display a new version 1.7 after the source code has been modified).

As to claims 17-32, these are computer program product claims of method claims 1-16.

Note the rejections of claims 1-16 above respectively.

As to claim 33-37, and 39-40, these are system claims of method claims 1-4, 11, 5-6.

Note the rejections of claims 1-4, 11, 5-6 above respectively.

Art Unit: 2174

As to claim 38, Per Cederqvist teaches the data processing system of claim 37, wherein the memory device further comprises a transient meta model, wherein said transient meta model stores the language neutral representation of the source code (2. The Repository, page 9).

Response to Arguments

5. Applicant's arguments filed in the Amendment C have been fully considered but they are not persuasive.

Applicants argued the following:

Per Cederqvist does not disclose conversion of source code of any kind into a language-neutral format.

Examiner disagrees for the following reasons:

Per Cederqvist clearly teaches that a user can use an Emacs package called emerge to help the user resolve conflicts, page 64; therefore, to be able to solve the conflicts of the codes or versions, CVS must somehow view the source code with warning comments or debugging messages to help the user to shove the conflicts of the codes, and the indications of the edits of the source code >>>> and <<<<, pages 62-63, indicate modified part of the code.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T Chuong whose telephone number is 703-305-5753. The examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

Art Unit: 2174

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on 703-308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

05/25/04

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100